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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/347,496	07/02/1999	JIANGCHUN XU	21021.471C1	3936

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EXAMINER	
SOUAYA, JEHANNE E	

ART UNIT	PAPER NUMBER
1634	19

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.	Applicant(s)
09/347,496	Jiangchun Xu
Examiner	**Art Unit**
Jehanne Souaya	1634

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *Nov 29, 2001* .

2a) ☐ This action is **FINAL.** 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-64 and 79-85* is/are pending in the application.

4a) Of the above, claim(s) *1-64* is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *79-85* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

a) ☐ All b) ☐ Some* c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

15) ☒ Notice of References Cited (PTO-892)
16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 16
18) ☐ Interview Summary (PTO-413) Paper No(s). _____
19) ☐ Notice of Informal Patent Application (PTO-152)
20) ☐ Other:

DETAILED ACTION

1. Currently, claims 1-64 and newly added claims 79-85 are pending in the instant application. Claims 1-64 have been withdrawn from consideration as being directed to non elected inventions. All the amendments, declaration and arguments have been thoroughly reviewed but are deemed insufficient to place this application in condition for allowance. Any rejections not reiterated are hereby withdrawn. The following rejections are either newly applied or are reiterated. They constitute the complete set being presently applied to the instant Application. Response to Applicant's arguments follow. This action is NON-FINAL.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. In view of applicants comments in the response, the declaration, and the post filing date art (art that became available after the last office action was mailed), the rejection of previously pending claims 65-70 and 76-78 under 35 USC 101 will not be applied to the newly added claims.

New Grounds of Rejection

Claim Rejections - 35 USC § 112

4. Claims 79-84 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. There are many factors to be considered when determining whether there is sufficient evidence to support determination that a disclosure does not satisfy the enablement requirements and whether any necessary experimentation is undue (See *In re Wands,* 858 F. 2d 731, 8 USPQ2d 1400, 1404 (Fed. Cir. 1988)). These factors include, but are not limited to:

Quality of Experimentation Necessary
Amount of Direction and Guidance
Presence and Absence of Working Examples
Nature of the Invention
Level of predictability and unpredictability in the art

Nature of the Invention

The claims are broadly drawn to a method for determining the presence of colon cancer in a patient by detecting, in any biological sample from a patient, hybridization between an oligonucleotide that hybridizes to a polynucleotide sequence (in a biological sample) comprising SEQ ID NO 21, or to a polynucleotide sequence having at least 90% identity to SEQ ID NO 21, under moderately stringent conditions, and comparing the amount of oligonucleotide that hybridizes to the polynucleotide with a predetermined cut off value, wherein an increase in the amount of oligonucleotide that hybridizes to the polynucleotide as compared to the

predetermined cut off value indicates the presence of cancer in a patient. It should be noted that detecting hybridization between an oligonucleotide that hybridizes to a polynucleotide comprising SEQ ID NO 21 or comprising a sequence that has at least 90% identity to SEQ ID NO 21, encompasses detecting mutants, homologs, and variants of SEQ ID NO 21. The claims are also drawn to monitoring the progression of colon cancer in a patient by obtaining a biological sample from a patient at different points in time and comparing the amount of oligonucleotide that hybridizes to the polynucleotide in a sample taken at a first point in time with the amount of oligonucleotide that hybridizes to the polynucleotide in a sample taken at subsequent points in time, wherein an increase in the amount of oligonucleotide that hybridizes to the polynucleotide from a sample taken at a subsequent point in time as compared to the first biological sample taken indicates progression of colon cancer and a decrease indicates remission of the colon cancer.

Amount of Direction and Guidance

The specification teaches using PCR based subtraction of a pool of three colon tumors with a pool of normal colon, spleen, brain, liver, kidney, lung, and other tissues to construct a cDNA library(p. 50) wherein rare transcripts that are overexpressed may be recoverable. The specification teaches that mRNA expression levels were determined using micro array technology and that one hundred and forty nine clones showed two or more fold overexpression in the colon tumor group as compared to the normal tissue group (p. 52). The specification further teaches that SEQ ID NO 21, which has homology to LI cadherin, showed over expression

in about half of colon tumors tested and low level overexpression in three out of six normal colon tissues (p. 53, lines 8-10). The specification, however, does not provide any guidance as to how one of skill in the art would distinguish between 'overexpression' and 'low level overexpression'.

Presence and Absence of Working Examples

The specification provides no working examples of detecting colon cancer in a patient by detecting overexpression, as compared to a predetermined cut off value, of SEQ ID NO 21, or sequences that have 90% identity to SEQ ID NO 21 in any biological sample from the patient. The specification provides no teaching or working examples of detecting colon cancer in a patient by detecting an increase in the amount of an oligonucleotide that hybridizes to a polynucleotide having 90% identity to SEQ ID NO 21 under moderately stringent conditions. Such a method encompasses determining that a patient has colon cancer by detecting an overexpression of mutants, homologs, and variants of SEQ ID NO 21, whereas the specification has provided no teaching that mutants, homologs, and variants of SEQ ID NO 21 are overexpressed in colon tumor tissue, or in any biological sample from a patient with colon cancer. The specification does not provide any teaching or working examples of detecting the progression of colon cancer in a patient. The specification does not teach whether expression of SEQ ID NO 21, or mutants, variants, or homologs of SEQ ID NO 21 increases or decreases with the progression of colon cancer.

Level of Predictability and Unpredictability in the Art

The art does not teach detecting overexpression of SEQ ID NO 21, or an increase in hybridization of an oligonucleotide with a polynucleotide comprising sequences that are at least 90% homologous to SEQ ID NO 21 under moderately stringent conditions. The specification does teach that SEQ ID NO 21 has homology to LI cadherin. A sequence search revealed that SEQ ID NO 21 is identical to LI cadherin except for two mismatches at nucleotides 1 and 3 as well as an insertion of an "n" at position 257 of SEQ ID NO 21. The post filing date art, however, teaches (Grotzinger et al., Gut, July 2001, vol. 49, pp 73-81) that LI-cadherin is expressed in the small and large bowel of healthy individuals but is not expressed in the oesophagus and stomach, and that 12 (from 10 patients) of 77 (from 30 patients) gastric biopsies from patients with intestinal metaplasia stained positive for LI-cadherin. Thus, Grotzinger teaches that while expression of LI-cadherin appears to be associated with gastric intestinal metaplasia, Grotzinger also teaches that LI-cadherin is expressed in the large intestine of healthy individuals.

Quality of Experimentation Necessary

Therefore, based on the lack of guidance from the specification, and the teachings of the art, it would require undue experimentation for one of skill in the art to practice the invention as broadly as it is claimed. Firstly, the specification provides no guidance as to whether the presence of colon cancer can be detected in a patient by detecting an overexpression of SEQ ID NO 21, sequences comprising SEQ ID NO 21, mutants, homologs, or variants of SEQ ID NO 21

in any biological sample. The recitation of biological samples encompasses blood, sputum, saliva, urine, and tissues from any source however the specification has not taught that an overexpression of SEQ ID NO 21, sequences comprising SEQ ID NO 21, mutants, homologs, or variants of SEQ ID NO 21 can be detected in any other tissues except for normal colon or colon tumor tissue. For example, neither the specification nor the art provide evidence that mRNA expression, let alone elevated mRNA expression of SEQ ID NO 21 can be detected in a blood sample from a patient, which is unpredictable because it is unclear whether SEQ ID NO 21 is expressed or secreted in blood. Further, even if SEQ ID NO 21 exists or is secreted in blood, it is unpredictable whether such levels would be detectable given the diluting effect of the circulatory system. Secondly, the specification teaches that SEQ ID NO 21 showed two or more fold over overexpression in the colon tumor group as compared to the normal tissue group (p. 52), however the normal tissue group encompasses a large number of different tissues, and the result of this micro array study could be due to the fact that the expression of SEQ ID NO 21 is colon tissue specific, and not colon tumor tissue specific. It is noted that SEQ ID NO 21 shows strong homology (2 mismatches and an insertion for over 346 nucleotides of SEQ ID NO 21 relative to a portion of LI cadherin) to a portion of LI-cadherin which is known in the art to be expressed in the large intestine but not the stomach or esophagus of healthy individuals (see Grotzinger). Thirdly, the specification further teaches that overexpression of SEQ ID NO 21 was found in about half of colon tumors and that 'low level overexpression' was found in 3/6 normal colon tissues, however, the specification does not teach the level of expression in the other 3 normal

colon tissues. Further, given that the sample size for normal colon tissue taught by the specification is small (6) and that the specification only teaches a "relative" level of expression for 3 of the 6 samples, and further that the specification does not teach whether the difference between overexpression and "low level overexpression" was statistically significant, or how one of skill in the art would distinguish overexpression from 'low level overexpression', undue experimentation would be required of the skilled artisan to determine whether a predictable correlation exists between elevated expression of SEQ ID NO 21 mRNA in colon tumor tissue and colon cancer.

Further, a correlation between an increase in expression of SEQ ID NO 21 or mutants, homologs, or variants of SEQ ID NO 21 and progression of colon cancer is clearly unpredictable in light of the lack of guidance from the specification and the art. It is unclear whether expression of SEQ ID NO 21 increases with progression or decreases with remission of colon cancer. Without evidence as to the correlation between expression of SEQ ID NO 21, or mutants, variants, or homologs of SEQ ID NO 21, the skilled artisan would be required to practice undo experimentation to determine whether a correlation exists between an increase in elevated expression of SEQ ID NO 21 or mutants, homologs, or variants of SEQ ID NO 21 and progression of colon cancer in a patient. Consequently since the art does not show a correlation between an increase in elevated SEQ ID NO 21 expression and the progression of colon cancer and since the specification offers no guidance as to such a correlation, and because the level of unpredictability of the correlation between elevated SEQ ID NO 21 expression and presence of

colon cancer, let alone progression of colon cancer, is high, undo experimentation would be required by the skilled artisan to make and use the claimed invention.

Response to Arguments

The response traverses the rejection. Applicants remarks on page 6 are moot in view of the withdrawal of the rejection under 35 USC 101. The response further asserts at page 7 that the specification clearly defines a "colon tumor protein" as "a protein that is expressed in colon tumor cells at a level that is at least two fold, and preferably at least five fold, greater than the level of expression in a normal tissue (p. 14, lines 25-27 of the specification). This argument was thoroughly reviewed but was found unpersuasive because the definition cited in applicants response is directed to the level of protein expression, while the claims and evidence in the specification are directed to level of mRNA expression. The specification does not provide any evidence that the protein expressed by SEQ ID NO 21 is elevated at least two fold in colon tumor tissue than in normal tissue. The response further asserts that the specification teaches at page 52, lines 10-11 that the isolated cDNAs, including SEQ ID NO 21 showed two or more fold over-expression in the colon tumor probe group as compared to the normal tissue probe group. This argument has been thoroughly reviewed but was found unpersuasive because the "normal" tissue probe group includes a large number of a wide range of tissues, thus the two or more fold overexpression could be due to the fact that the transcript encompassing SEQ ID NO 21 is a colon tissue specific transcript. The evidence provided by the specification does not make this clear, as the expression levels between colon tumor tissue and normal colon tissue are *not* given

in terms of 'two or more fold", which is how the specification defines a colon tumor protein, but rather in terms of "overexpression" and "low level overexpression". Since the specification does not teach what differences in expression are encompassed by the vague terms "overexpression" vs "low level overexpression" or what the level of expression of SEQ ID NO 21 was in the other 3 normal colon tissues, the skilled artisan would not be able to establish whether a predictable correlation exists between elevated expression of SEQ ID NO 21 and the presence of colon cancer in a patient.

Applicants comments at page 7 and 8 will be addressed to the extent that they apply to the new grounds of rejection, it is noted that point 6 in the previous office action has been obviated by applicants cancellation of claims 76-78. The response asserts that SEQ ID NO 21 is a fragment of the known polynucleotide sequence of LI-cadherin, as evidenced by the Declaration of Dr. Susan Harlocker, and that therefore, at the time the present application was filed, a skilled artisan could, through routine experimentation have identified in the publicly available databases, a full length sequence comprising the polynucleotide of SEQ ID NO 21 and that coupled with the various methodologies for oligonucleotide detection either explicitly disclosed or otherwise incorporated by reference, one of skill in the art could have practiced the presently claimed methods for the detection of colon cancer without undue experimentation. This argument, as well as the Declaration, were thoroughly reviewed but were not found persuasive. Firstly, the specification does not teach that SEQ ID NO 21 is a fragment of LI-cadherin. Secondly, it is not understood if applicants are asserting that SEQ ID NO 21 is in fact a fragment of LI-cadherin, as

two mismatched bases and an inserted base are present in SEQ ID NO 21 relative to LI-cadherin. Furthermore, if applicants are asserting that SEQ ID NO 21 is LI-cadherin, the postfiling date art teaches that LI-cadherin was expressed in the large intestine of *healthy* individuals (see Grotzinger), thus it is unclear whether SEQ ID NO 21 is a colon tissue specific transcript, (that is expressed in both colon tumor and normal colon tissues). This evidence coupled with the vague description of a difference in expression between colon tumor and normal colon tissue ('overexpression' vs 'low level overexpression') taught by the specification demonstrates the unpredictability of determining the presence of colon cancer in a patient based on the expression of SEQ ID NO 21 relative to a predetermined cut off value. Since, the specification does not teach what level of expression of SEQ ID NO 21, or mutants, homologs, or variants of SEQ ID NO 21 constitutes an acceptable predetermined cut off value, the claims provide that the skilled artisan must determine that value. Further, should the skilled artisan use the definition of a "colon tumor protein" on page 14 of the specification to determine this predetermined cut off value, the specification provides insufficient guidance for the definition as the specification teaches that SEQ ID NO 21, not the protein expressed by SEQ ID NO 21, showed 'overexpression' in half of colon tumor tissue tested versus 'low level overexpression' in 3/6 normal colon tissue. Further, the specification does not teach whether 'overexpression' constitutes two or more fold overexpression relative to the 'low level overexpression' detected for 3/6 normal colon tissue samples.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claim 85 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dantzig et al (US Patent 5,710,018; 1/20/1998) in view of Reeves et al (US Patent 6,312,891) and Ahern, H. ("Biochemical, Reagent Kits Offer Scientist Good Return on Investment" from www.the-scientist.library.upen.edu; 1995, pages 1-5).

The claim is drawn to a diagnostic kit comprising at least one oligonucleotide that hybridizes under moderately stringent conditions to a polynucleotide sequence comprising SEQ ID NO 21 and a reporter group for use in a polymerase chain reaction or hybridization assay. It is noted that the specification does not define an upper length limitation for the term oligonucleotide. Dantzig teaches a nucleic acid sequence of 2499 nucleotides that codes for a mammalian influx peptide transporter (see SEQ ID NO 2). SEQ ID NO 21 of the presently claimed invention is identical to nucleotides 1574 to 1918 of SEQ ID NO 2 taught by Dantzig except for a mismatch at nucleotides 1 and 3, and an insertion of an "n" at position 257 of SEQ ID NO 21. It is noted that SEQ ID NO 2 taught by Dantzig would not hybridize to SEQ ID NO 21 of the presently claimed invention under moderately stringent conditions, but that the complement of SEQ ID NO 2 taught by Dantzig would. Dantzig specifically teaches that it

would be useful to generate probes that are specific to the conserved extracellular region of the influx peptide transporter (see col. 8, lines 43-45). It is noted that the nucleotides coding for the extracellular portion correspond to nucleotides 1 to 2337 of SEQ ID NO 2 (col 8, lines 26-30) and that a probe comprising this region, which the ordinary artisan would have been motivated to construct based on the teachings of Dantzig, would hybridize to SEQ ID NO 21 under moderately stringent conditions. Thus, it would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to have constructed a probe (oligonucleotide of the presently claimed invention) that would be able to hybridize under moderately stringent conditions to SEQ ID NO 21 of the presently claimed invention as Dantzig teaches that it would be useful to construct a probe specific to the conserved extracellular region of the influx peptide transporter for the purpose of identifying proteins related to the influx peptide transporter. Although Dantzig does not specifically teach constructing a probe for the purposes of hybridizing to SEQ ID NO 21 of the presently claimed invention, the ability to hybridize to SEQ ID NO 21 under moderately stringent conditions is a property of the probe taught by Dantzig. Although Dantzig does not teach a kit comprising an oligonucleotide that hybridizes to SEQ ID NO 21 under moderately stringent conditions and a reporter group for use in a polymerase chain reaction or hybridization assay, it would have further been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made to package the probe taught by Dantzig in kit format as Ahern teaches that researchers are buying premade kits because they are convenient and they save time (see p. 4, second paragraph). Therefore, the

ordinary artisan would have been motivated to package the probe taugth by Dantzig in kit format for the purposes of having a premade kit ready to use for identifying proteins related to the influx peptide transporter, as Dantzig teaches that such a probe would be useful and Ahern teaches that packaging reagents in kit format is convenient and saves time. Although Dantzig and Ahern do not teach a kit comprising a reporter group for use in a hybridization assay, Reeves teaches the use of labels (or reporter groups) to detect hybridization between a probe and a target, as well as a kit comprising a labeled probe. Reeves specifically teaches that probes can be labeled with a fluorophore, biotin, a radioisotope, or other tag molecules and the hybridization between the probe and its target can be detected (see col. 4, lines 5-15), and that a kit of the invention of Reeves includes fluorescently labeled oligonucleotide DNA probe (see col. 5, lines 9-14). Therefore, it would have further been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made to include a reporter group (label) as taught by Reeves in the kit of Dantzig and Ahern for the purposes of detecting hybridization between the probe taught by Dantzig and a target.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See In re Goodman, 11 F.3d 1046, 29 USPQ2d 2010 (Fed.

Cir. 1993); In re Longi, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); In re Van Ornum, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); In re Vogel, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and In re Thorington, 418 F.2d 528, 163 USPQ 644 (CCPA 1969). A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

7. Claim 85 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 15 of copending Application No. 09/922,217 in view of Reeves et al (US Patent 6,312,891) and Ahern, H. ("Biochemical, Reagent Kits Offer Scientist Good Return on Investment" from www.the-scientist.library.upen.edu; 1995, pages 1-5).

The claim is drawn to a diagnostic kit comprising at least one oligonucleotide that hybridizes under moderately stringent conditions to a polynucleotide sequence comprising SEQ ID NO 21 and a reporter group for use in a polymerase chain reaction or hybridization assay. Claim 15 of the '217 application recites a diagnostic kit comprising at least one oligonucleotide

that hybridizes to a sequence recited in SEQ ID NO 21 under moderately stringent conditions. It is noted that the recitation of "comprising" in claim 85 of the instant application and "recited in" in claim 15 of the '217 application both encompass the sequence of SEQ ID NO 21. Although claim 15 of the '217 application does note recite a reporter group for use in a polymerase chain reaction or hybridization assay, it would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made to include a reporter group in the kit of claim 15 for the purpose of detecting hybridization between the claimed oligonucleotide and SEQ ID NO 21, as exemplified by the teaching of Reeves et al. Reeves teaches the use of labels (or reporter groups) to detect hybridization between a probe and a target, as well as a kit comprising a labeled probe. Reeves specifically teaches that probes can be labeled with a fluorophore, biotin, a radioisotope, or other tag molecules and the hybridization between the probe and its target can be detected (see col. 4, lines 5-15), and that a kit of the invention of Reeves includes fluorescently labeled oligonucleotide DNA probe (see col. 5, lines 9-14). Further, Ahern teaches that researchers are buying premade kits because they are convenient and they save time (see p. 4, second paragraph). Therefore, the ordinary artisan would have been motivated to improve the kit of claim 15 of the '217 application to include a reporter group for the purpose of providing premade reagents in kit format that would be useful for a researcher as Ahern teaches that such would be convenient and would save time.

This is a provisional obviousness-type double patenting rejection.

Conclusion

8. No claims are allowable.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner Jehanne Souaya whose telephone number is (703)308-6565. The examiner can normally be reached Monday-Friday from 9:00 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Jones, can be reached on (703) 308-1152. The fax phone number for this Group is (703) 305-3014.

Any inquiry of a general nature should be directed to the Group receptionist whose telephone number is (703) 308-0196.

Jehanne Souaya

Jehanne Souaya
Patent examiner
Art Unit 1634
March 21, 2002